6

Patent Claims

1. A method for aggregating incoming packets into optical bursts in an edge node of an Optical Burst Switched Network, comprising the steps of:

storing the incoming packets to generate an optical burst;

associating each incoming packet with a generated random binary digit with a probability for a first and a second value of the binary digit; and

wherein, a packet with a binary digit having the first value indicates a transition between optical bursts,

sending the optical burst with the aggregated packets when a transition is indicated by the first value.

2. The Method as claimed in claim 1,
c h a r a c t e r i z e d   i n   t h a t,
wherein the transition is a beginning of the new optical burst.

3. The Method as claimed in claim 1,
c h a r a c t e r i z e d   i n   t h a t,
wherein the transition is an end of the optical burst.

4. A method for aggregating incoming packets into optical bursts in an edge node of an Optical Burst Switched Network, whereby every time a received incoming packet is stored and a random binary digit, with a probability for the first and the second value of the binary digit, is generated and compared with the first value of the binary digit and, if equal, the stored packets are sent as an optical burst.

5. The Method as claimed in one of claims 1 to 4,
c h a r a c t e r i z e d   i n   t h a t,

7

where said optical burst is sent through the Optical Burst
Switched Network.

6. The Method as claimed in one of claims 1 to 5,
5   c h a r a c t e r i z e d   i n   t h a t,
where said random binary digit is generated according to a
Bernoulli probability distribution.

7. The Method as claimed in one of claims 1 to 6,
10   c h a r a c t e r i z e d   i n   t h a t,
that IP packets are used as incoming packets.

8. An edge node apparatus for an Optical Burst Switched Net-
work for aggregating incoming packets into optical bursts,
15   comprising:

a buffer to accumulate the incoming packets as an optical
burst; and

20   a random generator to generate a sequence of binary digits
with a probability for a first and a second value of the bi-
nary digit, such that every incoming packet is associated
with a generated binary digit,

25   wherein an packet with the first value of the binary digit
indicates a transition between optical bursts; and

wherein the optical burst with the aggregated packets is sent
when a transition is indicated by the first value.
30
9. The apparatus as claimed in claim 8,
c h a r a c t e r i z e d   i n   t h a t,
wherein the random generator is a Bernoulli random generator
that generates a sequence of binary digits in accordance with
35   a Bernoulli probability distribution.